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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,886	04/16/2001	Hideki Umeyama	TAN-285	5674

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EXAMINER

FERNSTROM, KURT

ART UNIT PAPER NUMBER

3712

DATE MAILED: 10/06/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,886

Applicant(s)

UMEYAMA ET AL.

Examiner

Kurt Fernstrom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,6,8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8 and 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 6, 8 and 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 5, 6 and 8 recite the limitation "said self hardening type chemicals" in line 2. There is insufficient antecedent basis for this limitation in the claims, as claims 1 and 3 do not recite the word "type". Also, the use of the word "type" makes the scope of claims 5, 6 and 8 unclear, for reasons stated in prior Office Actions. Claim 10 contains "wherein said" as the last two words, due to an apparent typographical error. It is not clear whether any further limitations were intended to be added to the claim. Also, with respect to claims 11, 18 and 19, it is not clear what is meant by a "water cellulose type resin", for substantially similar reasons to those provided above pertaining to use of the word "type".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5, 6, 8, 10 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grubbs in view of Sugiura, and further in view of Wilder. Grubbs discloses in Figures 1-5 and in column 2, lines 17-66 of the specification a method and device comprising an eye which is prepared by creating an empty lens by aspiration, injecting a polymer into the empty and curing the polymer to lens to create an artificial lens. While Grubbs fails to disclose the use of a pig eye to simulate cataract, the use of hardening chemicals to create a cataract in a pig eye for simulated surgery is known. Sugiura discloses a model of an eye with cataract comprising a pig's eye which has hardening chemicals injected into the lens to form the model. It would have been obvious to one of ordinary skill in the relevant art to modify the model disclosed by Grubbs by injecting chemicals into an pig eye for the purpose of creating a false cataract for use in simulated surgery. Grubbs as viewed with Sugiura fails to the injection of a self-hardening chemical selected from the group listed in claim 1 into the lens. Such self hardening chemicals are known. Wilder discloses that dibenzylidene sorbitol is a self-hardening chemical which forms three dimensional fibrillar networks without the need to interact chemically with other substances. It would have been obvious to one of ordinary skill in the relevant art to modify the model disclosed by Grubbs as viewed with Sugiura by injecting dibenzylidene sorbitol into an empty lens for the purpose of hardening the eye to produce a simulated cataract without requiring the curing process as

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described by Grubbs. Also, although the location of the injection of claim 5 is not explicitly disclosed by Grubbs or Sugiura, the claimed location does not appear to yield any unexpected advantages over the location disclosed by Sugiura, and thus would also have been obvious to one of ordinary skill in the art as an aesthetic choice of design. With respect to claims 12, 14 and 16, while Grubbs does not specifically use the word "phacoemulsification" in its description, Grubbs does disclose the use of high frequency vibrations to cause ultrasonic disintegration of the lens prior to its removal from the lens, thus at least suggesting if not discloses the use of phacoemulsification in emptying the lens capsule of the eye.

5. Claims 11, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grubbs in view of Sugiura and Wilder, and further in view of Fisher. Grubbs as viewed in combination with Sugiura and Wilder discloses all of the limitations of the claims with the exception of the specific materials claimed. Resin, glycerine and N-methyl-2-pyrrolidene are all known solvents, however, as disclosed in column 5, 53 to column 6, line 10 of Fisher. It would have been obvious to one of ordinary skill in the relevant art to modify the model disclosed by Grubbs as viewed with Sugiura and Wilder by injecting resin, glycerine and N-methyl-2-pyrrolidene into the device for the purpose of providing a composition which acts as a solvent.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 3, 5, 6, 8 and 10-19 have been considered but are moot in view of the new ground(s) of rejection based upon newly discovered art. Also,

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the Declarations by Drs. Nakaki and Sugiura are noted. While it is appreciated that there are differences between the two respective procedures, the claimed invention is considered to be obvious, viewing the cited prior art in combination.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gwon and Pallin disclose methods of emptying a lens capsule and the injecting material therein. Bank discloses a device for performing phacoemulsification.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kurt Fernstrom whose telephone number is (703) 305-0303.

KF

September 30, 2003

Kurt Fernstrom
Kurt Fernstrom